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| Notice of Allowability | Application No. | Applicant(s) |
| | 09/346,277 | AOKI, SHIN |
| | Examiner | Art Unit |
| | Nhan T. Tran | 2615 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to amendment filed 6/18/2004.
2. The allowed claim(s) is/are 1-10, 12-18 and 20.
3. The drawings filed on 18 June 2004 are accepted by the Examiner.
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/18/2004 has been entered.

Response to Arguments

2. Applicant's arguments, see amendment, filed 6/18/2004, with respect to claims 1-10, 12-18 and 20 have been fully considered and are persuasive. The rejection of these claims is withdrawn.

Drawings

3. The corrected drawings were received on 6/18/2004. These drawings are Figs. 1, 5 & 6.

Specification

4. Substitute specification was received on 6/18/2004. The substitution is accepted.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ken Yoshida on 10/28/2004 (see attached copy of certificate of transmission by facsimile dated 10/28/2004).

The application has been amended as follows:

Regarding claim 6, please change "the color image area sensors" to -- color image area sensors --.

Regarding claim 7, please change "the set of correction coefficients is selected" in line 2 of the claim to -- the correction coefficients are selected --.

Regarding claim 9, please change "the set of correction coefficients is selected" in lines 1 & 2 of the claim to -- the correction coefficients are selected --.

Regarding claim 12, please change "a horizon direction" in line 4 of the claim to -- a horizontal direction --.

Allowable Subject Matter

6. Claims 1-10, 12-18 and 20 are allowed with the Examiner's amendment stated above.

The following is an examiner's statement of reasons for allowance:

Regarding independent claim 12, the prior art of record fails to teach or fairly suggest the combination of all limitations of claim 12 including "...a coefficient determination unit connected to the direction determination unit for adjusting a RGB conversion matrix of orientation-sensitive correction coefficients from predetermined sets of the correction coefficients based upon the direction; and data conversion unit connected to the coefficient determination unit for correcting the data based upon the adjusted RGB conversion matrix of the correction coefficients to perform a sum of product operation on the RGB data."

Regarding independent claim 1, the claim is allowed as being a method claim of claim 12.

Regarding independent claim 20, the prior art of record also fails to teach or fairly suggest the combination of all limitations of claim 20 including "...determining a continuous direction of the abrupt intensity gradient including stripes between a horizontal direction and vertical direction, the sampled areas being covered by a planar array of color area image sensors, [the] color area image sensors generating primary colors; adjusting a RGB conversion matrix orientation-sensitive of correction coefficients based upon the direction; and correcting the data based upon the adjusted RGB conversion matrix of the correction coefficients to perform a sum of products operation on the RGB data."

Regarding claims 2-10, the claims are allowed as being directly or indirectly dependent of claim 1.

Regarding claims 13-18, the claims are allowed as being directly or indirectly dependent of claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (703) 605-4246. The examiner can normally be reached on Monday - Thursday, 8:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.



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